

## E-Tec™ 521

### Wax Emulsion Corrosion Inhibitors

**E-Tec 521** is a unique, water-based wax emulsion which is used as a dual purpose dry film lubricant and corrosion preventive. It is recommended for use on artillery shell casing, small arms ammunition clips, and other weatherproofing military applications. **E-Tec 521** is also an excellent corrosion preventive and dry film lubricant for steel strapping and is a good piano stringing lubricant. **E-Tec 521** is used as a torque reduction and corrosion resistant lubricant on various fasteners and as a dry film lubricant in the installation of various rivets. This product is recommended for use as a corrosion preventive and decorative coating on cast iron and over treated surfaces such as phosphate, bonderized and anodized surfaces. **E-Tec 521** provides additional protection over all types of plating, including cadmium and zinc. The dry film lubricating and release characteristics of this product make it an ideal mold release for gold leaf and a good joint lubricant for umbrella-type television antennas. In addition, **E-Tec 521** can be used as a dressing on rubber, plastic and leather or to provide surface protection and enhance the appearance of interior wood paneling.

#### Advantages

- Excellent corrosion control
- Superior dry film lubrication
- Enhances appearance of most surfaces
- Effective on a wide variety of substrates
- Provides medium gloss dry film (buffable)
- Nonflammable
- Easy to apply
- Easily diluted and mixed
- Excellent coverage
- Easy to remove

#### Characteristics

**Test Data for ASTM-D-2247-68**  
(Humidity Cabinet, 100% - 100°F)

Concentration	Cold Roll Steel/Hrs.	Iron Phosphate/Hrs.	Zinc Phosphate/Hrs.
100%	48	80	80
80%	40	72	72
67%	32	48	48

**Test Data for ASTM-B-117-73**  
(Salt Fog-5% Salt, 100% - 100°F)

Concentration	Cold Roll Steel/Hrs.	Iron Phosphate/Hrs.	Zinc Phosphate/Hrs.
100%	2	4	15
80%	1	2	5
67%	-	2	5

**Application**

To achieve effective adhesion, apply **E-Tec 521** to surfaces that are completely free of oils, greases, acids, soaps and other foreign materials. The presence of water, unless excessive, will not interfere with adhesion or film forming characteristics. Parts must be dried before stacking.

**E-Tec 521** is a low viscosity liquid and is applied by any method or technique to the particular operation – flow coat, roll coater, mechanical wipe, immersion or spray.

Care must be taken to avoid spraying a dry or partially dry pattern, since a dry spray will dull the final gloss. The ideal spray gun is one which combines a comparatively high capacity air cap with a low capacity nozzle, resulting in a large volume of air mixed with a relatively small volume of material. Internal and external air mix spray techniques are satisfactory for **E-Tec 521** application as is airless spray. In all cases, the atomization air pressure should be kept high, from 65 – 75 pounds. Avoid inhalation of product in spray application.

Working dilutions of **E-Tec 521** should be determined by the end user. **E-Tec 521** can be diluted with tap water; however, if the local water is very hard, dilute with deionized water. For maximum protection and durability, use full strength.

**Additional Information**

**E-Tec 521** dries tack free under ambient conditions in approximately 20 minutes. Drying can be accelerated by application of heated air and increase air velocity. Drying time can also be accelerated by heating parts prior to application of coating.

**Caution**

Protect eyes from solutions with glasses, goggles, or a face shield. In the event of contact, flush eyes thoroughly with water and obtain medical attention.

**Removal of Finishes**

The **E-Tec 521** is easily removed in **EPI's** alkaline **E-Kleen** cleaning solutions.

## **Disposal**

Spent **E-Tec 521** solutions can be discharged into the sewer after neutralizing to the pH required by local sanitary department.

## **Packaging**

5 gallon and 55 gallon non-returnable containers.

## **IMPORTANT NOTICE! For Industrial Use Only**

The following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose: sellers and manufacturers only obligation shall be to replace such quantity of the product as proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. **Neither seller nor manufacturer shall be liable either in tort or in contract for any loss or damage, direct, incidental or consequential, arising out of the use or the inability to use the product.**

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